

SEQUENCE LISTING

<110> Ben-Bassat, Arie
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Ramos-Gonzalez, Isabel
Ramos, Juan
Sariaslani, Sima

<120> Method for the Production of p-Hydroxybenzoate in Species of
Pseudomonas and Agrobacterium

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465					470					475					480		
Gln	Glu	Arg	Val	Ala	Gln	Arg	Tyr	Gly	Thr	Val	Lys	Arg	Arg	Trp	Asn		
				485					490					495			

Thr Pro Ser Ser Ala Pro Trp Thr Arg Thr Thr Ser Trp His Pro Ala
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Asn Pro Ala Ser Thr Ser Pro Thr Ser Ser Asn Pro Lys Gln Asp Pro
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Ala Gly
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 <210> 43
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 <210> 44
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<210> 57
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<210> 70
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Gly Ala Ile Ser Arg Ala Met Gly Gly Thr Ser Ser Ser Tyr Tyr Thr
      35             40             45

Gly Asn Ala Ala Leu Ile Ser Asn Pro Ala Thr Leu Ser Leu Ala Pro
      50             55             60

Asp Gly Ser Gln Phe Glu Leu Gly Pro Asp Ile Val Ser Thr Asp Ile
      65             70             75             80

Glu Val Arg Asp Ser Ser Gly Ala Lys Val Lys Ser Ser Thr Glu Ser
      85             90             95

Asn Asn Arg Gly Pro Tyr Ile Gly Pro Gln Leu Ser Tyr Val Thr Gln
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Leu Asp Asp Trp Arg Phe Gly Ala Gly Leu Phe Val Ser Ser Gly Leu
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 145 150 155 160
 Pro Val Gly Phe Ser Tyr Gln Val Thr Pro Gln Leu Thr Val Gly Ala
 165 170 175
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 180 185 190
 Ser Ser Gln Val Gly Ala Leu Ala Ala Gln Gly Asn Leu Ser Gly Asp
 195 200 205
 Leu Val Ala Pro Leu Ala Gly Phe Val Gly Ala Gly Gly Ala Ala His
 210 215 220
 Phe Ser Leu Ser Arg Asn Asn Pro Val Gly Gly Ala Val Asp Ala Ile
 225 230 235 240
 Gly Trp Gly Gly Arg Leu Gly Leu Thr Tyr Lys Leu Thr Asp Lys Thr
 245 250 255
 Val Leu Gly Ala Met Tyr Asn Phe Lys Thr Ser Val Gly Asp Leu Glu
 260 265 270
 Gly Thr Ala Thr Leu Ser Ala Ile Ser Gly Asp Gly Ala Val Leu Pro
 275 280 285
 Leu His Gly Asp Ile Arg Val Lys Asp Phe Glu Met Pro Ala Ser Leu
 290 295 300
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 305 310 315 320
 Asp Val Lys Arg Val Tyr Trp Ser Asp Val Met Glu Asp Ile Ser Val
 325 330 335
 Asp Phe Lys Ser Gln Ser Gly Gly Ile Asp Ile Glu Leu Pro His Asn
 340 345 350
 Tyr Gln Asp Ile Thr Val Ala Ser Ile Gly Thr Ala Tyr Arg Val Asn
 355 360 365
 Asp Lys Leu Thr Leu Arg Ala Gly Tyr Ser Tyr Ala Gln Gln Ala Leu
 370 375 380
 Asp Ser Arg Leu Ile Leu Pro Val Ile Pro Ala Tyr Leu Lys Lys His
 385 390 395 400
 Val Ser Leu Gly Ser Asp Tyr Ser Phe Asp Lys Lys Ser Lys Leu Asn
 405 410 415
 Leu Ala Ile Ser Phe Gly Leu Lys Glu Ser Leu Asn Thr Pro Ser Tyr
 420 425 430
 Leu Ser Gly Thr Glu Thr Leu Lys Gln Ser His Ser Gln Ile Asn Ala
 435 440 445

Val Val Ser Tyr Ser Lys Ser Phe
450 455

<210> 93
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer used for cloning pcu for insertion into pMC3

<400> 93
gatgatgaag cttccccacc aaaccc 26

<210> 94
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer used for cloning pcu for insertion into pMC3

<400> 94
tcatagatca agcttttccc agtcacgacg 30

<210> 95
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer used for construction plasmids pPCUR1 and pPCUR2

<400> 95
ggggatcctc accgccggct caagg 25

<210> 96
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer used for constructing plasmids pPCUR1 and pPCUR2

<400> 96
gcgggtggga tccatgggtt ctctc 25

<210> 97
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<220>
 <223> primer used to map the transcript initiation site of tmoX

<400> 97
 cggtacttac tatatccggc ccg

23

<210> 98
 <211> 1836
 <212> DNA
 <213> Pseudomonas mendocina KR-1

<400> 98
 tcaactcccc ttgagccggt agctgatctg cgcgcgactc atgcccaca tctgcgcgcg 60
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 cccagctca accggttcat gtcctcgac aaccaactca gcccgcgctt gcggttcgcc 240
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 gccgggattg ctcgagggtt tgcgagtcac ggtcat 1836

<210> 99
 <211> 1476
 <212> DNA
 <213> Pseudomonas mendocina KR-1

<400> 99
 atggacacca cccgccctgc ctaccagaac ctgagctcc aacctctcgc cgggcaatgg 60
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ttgcgcacatcg	ccttgggccag	ccgcgaagac	ctcgacgcag	cctaccgcaa	ggcccgcgac	180
agccagcggg	agtgggagac	cacggcgccg	gccgagcgcg	cccgggtgct	gctggaagcg	240
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agccgcgtgt	accgcgcgcc	cctggggcgtg	atcggcgtga	tcagtcctgtg	gaacttcccc	480
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gccgaacacg	ccctggagtt	ggccaacagc	agcgagtaag	gcctgtccag	cgcggtgttc	1260
accgccagcc	tcgagcgcg	cgtgcagttc	gcccggcgca	tcacgcgcg	catgaccac	1320
gtgaacgaca	tcccgtttaa	cgacgagccc	aacgctccct	tcggcggcga	gaagaactct	1380
ggcctcggcc	gcttcaacgg	cgactgggcc	atcgaggagt	tcaccaccga	tcactggatc	1440
accctgcaac	acagcccgcg	gccctatccg	ttctga			1476

<210> 100
 <211> 336
 <212> DNA
 <213> Pseudomonas mendocina KR-1

<400> 100	
atgtcctcac	tcctcaacag
attttcgccc	tgtctgcccg
gagaacgtct	accagaaaa
accggccgcc	agctaccgcc
atgccggcct	ttccggcctc
atctccaaga	cccctgctac
	tgtggccaag
	ccctga
	336

<210> 101
 <211> 684
 <212> DNA
 <213> Pseudomonas mendocina KR-1

<400> 101	
atgaacatcg	aacgtcgta
gccatgggag	ccttcggcct
ctgcccaccc	tcgtcctggt
ggttcacagc	cggcgggcag
gtcttgggcc	tggagaagcg
gatgacgcca	gcgcgcgtct
tggctcggcc	agcatagcgc
agcggccagg	gctgctccct
agcctgagcg	aacagcaccc
agcggcggtc	ccgcgcaatg
gatgacagca	gtgcggcccc
gtttcgttct	cgatcctggt
	ttga
	684

<210> 102
 <211> 1593
 <212> DNA
 <213> Pseudomonas mendocina KR-1

<400> 102
atgaccgagc aaaccagaa caccctgatt ccccgaggcg tgaatgaagc caacctccag 60
caagccctgg ccaagttccg caagctgctg ggcgaggaca acgtcctggg caaggacgag 120
caactcatcc cctacaacaa gatcatgata gcagtggaca acgccaaca cgcgccctcc 180
gctgctgtca ccgccaccac tgtggaacag gtgcagggcg tggatgaagat ctgcaacgaa 240
tacggcattc cgggtgtggac catctccacc ggccgcaact tcggttacgg ctggggggcc 300
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gacggcatgt tccccaggc caactacggc atctgcacca agatgggttt ctggctgatg 720
cccaagcccc cgggtgttcaa gcccttcgag atcaagttcg agaacgagtc cgacatcagc 780
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gcgccctgga cccgaacaac atcctggcac ccggcacaatc cggcatcgac ctgcgcaaca 1560
agtttctaacc ctaagcaaga ccccgccggg taa 1593

<210> 103
<211> 1371
<212> DNA
<213> *Pseudomonas mendocina* KR-1

<400> 103
atgataaaaa tgaaaattgc cagcgtaact gtactgcctt tgagcgggta tgcttttagc 60
gtgcacgcta cacaggtgtt ccatctggag gggtatgggg caatctctcg tgccatggga 120
ggtaccagct catcgtatta taccggcaat gctgcattga tcagcaaccc cgctacattg 180
agcttggttc cggacggaag tcagtttgag ctggggccgg atatagtaag taccgatatt 240
gaggttcgtg acagcagcgg tgcgaaagta aaaagcagca cggaaatcaa taatcgaggc 300
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caaagccaca gccaaataaa cgcagtggtt tctacagca aaagctttta a 1371

<210> 104
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer

<400> 104
gcttcacagg tatctcg

17

<210> 105
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer

<400> 105
cagtcaatcc gctgcac

17

<210> 106
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer

<400> 106
gcagtatggt cacctgttcc

20

<210> 107
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer

<400> 107
ggttcgacca ccaggctac

19

<210> 108
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
 <223> primer

<400> 108
 ggatctcaaa gccctgacc 19

<210> 109
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<220>
 <223> primer

<400> 109
 tgctgcacaa ggccggtatc g 21

<210> 110
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<220>
 <223> primer

<400> 110
 ggtcatgaac cagctgaagc g 21

<210> 111
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<220>
 <223> primer

<400> 111
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<210> 112
 <211> 3554
 <212> DNA
 <213> Pseudomonas putida

<400> 112
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 gatgggctct acgagtttgt gggccttctt gatgctcatg gaaatgtgct tgaagtgaac 180
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 aaggcgcggtt ggtggcaaat ttcaaaaaaa accgaggcga cccaaaagcg acttgttgaa 300

